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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,086	06/27/2003	Zhicheng Li	44662B (1062-014C1)	7520
25215	7590	08/02/2004	EXAMINER	
DOBRUSIN & THENNISCH PC 401 S OLD WOODWARD AVE SUITE 311 BIRMINGHAM, MI 48009			FULLER, ERIC B	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 08/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/609,086

Applicant(s)

LI ET AL.

Examiner

Eric B Fuller

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Terminal Disclaimer

The terminal disclaimer filed on May 26, 2004 disclaiming the terminal portion of any patent granted on this application that would extend beyond the expiration date of US Patent No. 6,613,389 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, 9, 10, 22, 25, and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Locke et al. (US 6,291,019).

Locke teaches a two-component sprayed composition that is applied to automobile parts (column 3, lines 1-10). One component comprises aliphatic isocyanates, including isophorone diisocyanate (column 9, lines 30-50). The other component comprises amines (column 4, lines 23-67). The amines may be a mixture of aliphatic primary and secondary amines (column 4, lines 23-30). The components are

kept separate until mixed and also is thixotropic (column 8, lines 3-20). The composition amounts are within the applicant's claimed range (column 10, lines 28-50). Since the compositions of the claimed invention and the reference are the same, the coating of the reference must inherently also not blister, soften, lose adhesion, crack, or char under the claimed conditions.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 9, 10, and 21-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Locke et al. (US 6,291,019).

Locke teaches the limitations of claim 1. In the event the applicant argues the inherency position, examiner points out that the reference reaches to include fillers in order to achieve strength and hardness characteristics (column 7, lines 43-67). It would have been obvious and within the skill of one practicing in the art, through routine experimentation, to achieve the claimed characteristics by determining the relative amounts of the components in the mixture, including fillers. By doing so, the life of the product is extended.

Claims 2, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Locke et al. (US 6,291,019), as applied to claim 1 above, and further in view of Burton (US 5,925,466).

Locke teaches the limitations to claim 1, but is silent to the substrate being an automotive bed liner. However, Burton teaches that truck bed liners require characteristics that the composition of Locke provides (column 3, lines 1-17). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the composition taught by Locke in the bed liner taught by Burton. By doing so, one would have a reasonable expectation of success as Locke teaches to apply the composition to automobile parts requiring flexibility, hardness, and elasticity and Burton teaches that bed liners require such characteristics.

Claims 3, 13-15, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Locke et al. (US 6,291,019) in view of Burton (US 5,925,466), as applied to claim 2 above, and further in view of Wade et al. (US 5,580,945).

Locke, in view of Burton, teaches the limitations to claim 2, but is silent to using aspartic acid ester. However, Wade teaches that by using aspartic acid ester in the amine component, the resulting coating is hard, elastic, abrasion resistant, weather resistant, and has increased flexibility. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use aspartic acid ester in the composition taught by Locke. By doing so, one would reap the benefits of the

coating being hard, elastic, abrasion resistant, weather resistant, and having increased flexibility.

As to claims 15 and 20, Locke explicitly teaches these limitations in column 4, lines 55-67, and column 7, line 60.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Locke et al. (US 6,291,019), as applied to claim 1 above, and further in view of Wade et al. (US 5,580,945).

Locke teaches the limitations to claim 1, but is silent to using aspartic acid ester. However, Wade teaches that by using aspartic acid ester in the amine component, the resulting coating is hard, elastic, abrasion resistant, weather resistant, and has increased flexibility. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use aspartic acid ester in the composition taught by Locke. By doing so, one would reap the benefits of the coating being hard, elastic, abrasion resistant, weather resistant, and having increased flexibility.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Locke et al. (US 6,291,019), as applied to claim 1 above, and further in view of Meader, Jr. et al. (US 4,025,683).

Locke teaches the limitations to claim 1, but is silent to the metering containers of the spray apparatus. The reference does teach a conventional two-component spray system (column 12, lines 1-13). Meader teaches a two-component spray system that

uses metering, mixing, and spraying in order to deliver controlled amounts of the components (column 9, lines 10-24). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use metering in the spraying apparatus of Locke. By doing so, one would reap the benefits of controlling the amount of components delivered.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Locke et al. (US 6,291,019), as applied to claim 1 above, and further in view of Uhrhan et al. (US 4,145,512).

Locke teaches the limitations to claim 1, but is silent to the use of light stabilizers. However, Uhrhan teaches that the addition of light stabilizers for protection against discoloration and degradation. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use light stabilizers in the composition of Locke. By doing so, one would reap the benefits of protecting the composition from discoloration and degradation.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Locke et al. (US 6,291,019), as applied to claim 1 above, and further in view of Thomaides et al. (US 5,626,840).

Locke teaches the limitations to claim 1, but is silent to the use of static control agents. However, Thomaides teaches that it is desirable to control static through the use of agents in order to achieve quality spray coatings (column 14, lines 55-65). It

would have been obvious at the time the invention was made to a person having ordinary skill in the art to use static control agents in the composition of Locke. By doing so, one would reap the benefits of achieving quality spray coatings.

Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Locke et al. (US 6,291,019) in view of Burton (US 5,925,466) and Wade et al. (US 5,580,945), as applied to claims 3 and 14 above, and further in view of Thomaides et al. (US 5,626,840).

Locke, in view of Burton and Wade, teaches the limitations to claim 3 and 14, but is silent to the use of static control agents. However, Thomaides teaches that it is desirable to control static through the use of agents in order to achieve quality spray coatings (column 14, lines 55-65). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use static control agents in the composition of Locke. By doing so, one would reap the benefits of achieving quality spray coatings.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Locke et al. (US 6,291,019) in view of Burton (US 5,925,466) and Wade et al. (US 5,580,945) and Thomaides et al. (US 5,626,840), as applied to claim 18 above, and further in view of Meader, Jr. et al. (US 4,025,683).

Locke, in view of Burton, Wade, and Thomaides, teaches the limitations to claim 18, but is silent to the metering containers of the spray apparatus. Locke does teach a

conventional two-component spray system (column 12, lines 1-13). Meader teaches a two-component spray system that uses metering, mixing, and spraying in order to deliver controlled amounts of the components (column 9, lines 10-24). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use metering in the spraying apparatus of Locke. By doing so, one would reap the benefits of controlling the amount of components delivered.

Claims 1, 2, 4, 9, 10-12 and 21-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Primeaux, II et al. (US 5,731,397) in view of Wayne (US 4,341,412).

Primeaux teaches a two-component sprayed composition that is applied to the lining of railcars in order to protect them from impact resistance when loading and unloading (column 15, lines 3-15). One component comprises aliphatic isocyanates, including tetramethyl xylene diisocyanate (column 3, lines 1-35). The other component comprises amines (column 5, lines 1-21). The amines may be a mixture of aliphatic primary and secondary amines (column 4, lines 39-47). The components are kept separate until mixed and is thixotropic (column 14, lines 40-67). The composition amounts are within the applicant's claimed range (Table 4). Since the compositions of the claimed invention and the reference are the same, the coating of the reference must inherently also not blister, soften, lose adhesion, crack, or char under the claimed conditions. In the event the applicant argues the inherency position, examiner points out that the reference reaches to include fillers in order to achieve strength and hardness characteristics (column 7, lines 43-67). It would have been obvious and within

the skill of one practicing in the art, through routine experimentation, to achieve the claimed characteristics through the use of the fillers. By doing so, the life of the product is extended.

Primeaux teaches the limitations shown above, but is silent to the substrate being an automotive bed liner. However, Wayne teaches that truck bed liners require impact resistance for loading and loading cargo (abstract). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the composition taught by Primeaux as the bed liner taught by Wayne. By doing so, one would have a reasonable expectation of success as Primeaux teaches that the coating provides impact resistance for loading and unloading of cargo and Wayne teaches that bed liners require such characteristics.

Claims 3, 5, 13-15, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Primeaux, II et al. (US 5,731,397) in view of Wayne (US 4,341,412), as applied to claim 2 above, and further in view of Wade et al. (US 5,580,945).

Primeaux, in view of Wayne, teaches the limitations to claim 2, but is silent to using aspartic acid ester. However, Wade teaches that by using aspartic acid ester in the amine component, the resulting coating is hard, elastic, abrasion resistant, weather resistant, and has increased flexibility. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use aspartic acid ester in the composition taught by primeaux. By doing so, one would reap the benefits of the

coating being hard, elastic, abrasion resistant, weather resistant, and having increased flexibility.

As to claims 15 and 20, Primeaux explicitly teaches these limitations in column 5, lines 10-20, and column 15, lines 28-37).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable Primeaux, II et al. (US 5,731,397) in view of Wayne (US 4,341,412), as applied to claim 1 above, and further in view of Meader, Jr. et al. (US 4,025,683).

Primeaux, in view of Wayne, teaches the limitations to claim 1, but is silent to the metering containers of the spray apparatus. However, Meader teaches a two-component spray system that uses metering, mixing, and spraying in order to deliver controlled amounts of the components (column 9, lines 10-24). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use metering in the spraying apparatus of Primeaux. By doing so, one would reap the benefits of controlling the amount of components delivered.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Primeaux, II et al. (US 5,731,397) in view of Wayne (US 4,341,412), as applied to claim 1 above, and further in view of Uhrhan et al. (US 4,145,512).

Primeaux, in view of Wayne, teaches the limitations to claim 1, but is silent to the use of light stabilizers. However, Uhrhan teaches that the addition of light stabilizers for protection against discoloration and degradation. It would have been obvious at the

time the invention was made to a person having ordinary skill in the art to use light stabilizers in the composition of Primeaux, in view of Wayne. By doing so, one would reap the benefits of protecting the composition from discoloration and degradation.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Primeaux, II et al. (US 5,731,397) in view of Wayne (US 4,341,412), as applied to claim 1 above, and further in view of Thomaides et al. (US 5,626,840).

Primeaux, in view of Wayne, teaches the limitations to claim 1, but is silent to the use of static control agents. However, Thomaides teaches that it is desirable to control static through the use of agents in order to achieve quality spray coatings (column 14, lines 55-65). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use static control agents in the composition of Primeaux. By doing so, one would reap the benefits of achieving quality spray coatings.

Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Primeaux, II et al. (US 5,731,397) in view of Wayne (US 4,341,412) and Wade et al. (US 5,580,945), as applied to claims 3 and 14 above, and further in view of Thomaides et al. (US 5,626,840).

Primeaux, in view of Wayne and Wade, teaches the limitations to claim 3 and 14, but is silent to the use of static control agents. However, Thomaides teaches that it is desirable to control static through the use of agents in order to achieve quality spray coatings (column 14, lines 55-65). It would have been obvious at the time the invention

was made to a person having ordinary skill in the art to use static control agents in the composition of Primeaux. By doing so, one would reap the benefits of achieving quality spray coatings.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Primeaux, II et al. (US 5,731,397) in view of Wayne (US 4,341,412) and Wade et al. (US 5,580,945) and Thomaides et al. (US 5,626,840), as applied to claim 18 above, and further in view of Meader, Jr. et al. (US 4,025,683).

Primeaux, in view of Wayne, Wade, and Thomaides, teaches the limitations to claim 18, but is silent to the metering containers of the spray apparatus. Meader teaches a two-component spray system that uses metering, mixing, and spraying in order to deliver controlled amounts of the components (column 9, lines 10-24). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use metering in the spraying apparatus of Primeaux. By doing so, one would reap the benefits of controlling the amount of components delivered.

Response to Arguments

The Terminal Disclaimer filed May 26, 2004 has overcome the double patenting rejections of the previous Office Action. These rejections have been withdrawn accordingly.

Applicant argues that the claims have been amended in order to overcome the prior art of record. No arguments are made on how it is believed that the amendments

act to overcome the prior art made of record. The amendment adds the limitation of "the second component including an amine comprised of an amount of at least one aliphatic primary amine and an amount of at least one secondary amine." As shown above, both primary references explicitly teach this limitation. Thus, the amendment fails to overcome the art rejections of the previous Office Action. The art rejections of the previous Office Action are maintained.

Conclusion

Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

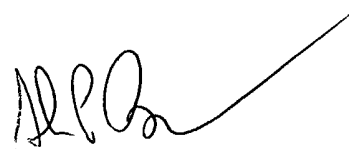
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B Fuller whose telephone number is (571) 272-1420. The examiner can normally be reached on Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck, can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



EBF



SHRIVE P. BECK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700